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APPLICANT : KANSAI PAINT CO LTD;

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TITLE : TREATMENT FOR PREVENTING CONTAMINATION ON COATING FILM

ABSTRACT : PROBLEM TO BE SOLVED: To maintain a photocatalytic effect for a long time by applying a water-soluble silicate coating on a base body to form a porous inorg. coating film and applying a treating agent containing a hydrolysate of an alkylsilicate or its low condensate, titanium dioxide having photocatalytic activity and a solvent on the film surface by impregnation.

SOLUTION: In order to prevent contamination of a porous inorg. coating film surface formed on the surface of a structure around an automobile road, the porous inorg. coating film produced by applying a water-soluble silicate coating on the base body is treated with a treating agent containing a hydrolysate of an alkylsilicate or its low condensate, titanium dioxide having photocatalytic activity and a solvent to impregnate. As the water-soluble silicate in the water-soluble silicate coating material, a modified water-soluble silicate is used. The modified silicate is obtd. by heating and reacting oxides and/or hydroxides of metals selected from transition metals and the like with a water-soluble silicate expressed by the general formula of $M_2O \cdot xSiO_2 \cdot yH_2O$ (wherein M represents $N(CH_2OH)_4$ or the like, (x) and (y) are each a positive number).

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